BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant:	**Gilles Gallou**
Serial Number:	**10/553,665**
Atty. Docket:	**PF030062**
Filing Date:	**July 27, 2006**
For:	**DATA REQUESTING AND TRANSMITTING DEVICES AND PROCESSES AND CORRESPONDING PRODUCTS**
Art Unit:	**2456**
Examiner:	**Joe Chacko**

APPEAL BRIEF

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Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

In response to the final Office Action dated October 12, 2010, and further to the Notice of Appeal filed on February 9, 2011, Appellant hereby submits an Appeal Brief in accordance with 37 C.F.R. §41.37 for the above-referenced application.

I. Real Party in Interest

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II. Related Appeals and Interferences

There are no prior or pending appeals, interferences, or judicial proceedings known to Appellant, the Appellant's legal representative, or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. Status of Claims

Claims 1-15 are pending in this application, and are rejected. The rejection of claims 1-15 is being appealed.

IV. Status of Amendments

No amendment subsequent to the final rejection of October 12, 2010 has been filed.

V. Summary of Claimed Subject Matter

Claim 1 recites a data requesting device through at least one first communication network from at least one data server, wherein said data requesting device is able to support up to a maximum bandwidth rate (see, for example, page 2, lines 29-30 and page 29, lines 4-7), and said data requesting device comprising:

a sending module for sending requests of determined data to the server via at least one second communication network (see, for example, page 2, lines 29-30 and page 29, lines 10-12),

a receiving module for receiving streamed data from said server into an input buffer via said first communication network and for providing said data to processing means for them to be exploited (see, for example, page 2, lines 29-30 and page 29, lines 13-16),

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a retriever module for retrieving information comprising information representative of said maximum bandwidth rate (see, for example, page 2, lines 29-30 and page 29, lines 17-19), and

said sending module sends to said server via said second network said information, so that said server is able to determine at least one size of successive portions of said required data and at least one delay between two successive sending steps of said portions (see, for example, page 2, lines 29-30 and page 29, lines 20-24).

Claim 9 recites a data transmitting device provided for a data requesting device according to claim 1 (see, for example, page 4, lines 5-6 and page 32, lines 18-19). The data transmitting device comprises:

a receiving module for receiving requests of determined data from at least one data requesting device (see, for example, page 4, lines 5-6 and page 31, lines 28-29),

specification means for determining at least one size of successive portions of said data to be provided to said data requesting device (see, for example, page 4, lines 5-6 and page 31, lines 30-32 and element 12), and

a streaming module for triggering streaming of said data portions to said data requesting device (see, for example, page 4, lines 5-6 and page 32, lines 1-2),

said receiving module receiving from said data requesting device information representative of capacities of said data requesting device, and said specification means determining said portion size in function of said information (see, for example, page 4, lines 5-6 and page 32, lines 3-7),

said capacities comprising a maximum bandwidth rate being supported by said data requesting device (see, for example, page 2, lines 29-30 and page 29, lines 5-6);

said specification means determining at least one delay between two successive sending steps of said portions in function of said information (see, for example, page 4, lines 5-6 and page 32, lines 10-12),

and said streaming module periodically triggers streaming of said data portions having said portion size to said data requesting device, with a period equal to said delay (see, for example, page 4, lines 5-6 and page 32, lines 13-16).

VI. Grounds of Rejection to be Reviewed on Appeal

The following grounds of rejection are presented for review in this appeal:

A.   The rejection of claims 1, 4-5, 7-11 and 14-15 under 35 U.S.C. §103(a) based on the proposed combination of U.S. Patent Publication No. 2003/0037160 by Wall et al. (hereinafter, "Wall") and U.S. Patent Publication No. 2002/004840 by Harumoto et al. (hereinafter, "Harumoto"); and

B.   The rejection of claims 2-3, 6 and 12-13 under 35 U.S.C. §103(a) based on the proposed combination of Wall, Harumoto and U.S. Patent Publication No. 2004/0168052 by Clisham et al. (hereinafter, "Clisham").

VII. Argument

A. Patentability of Claims 1, 4-5, 7-11 and 14-15

The rejection of claims 1, 4-5, 7-11 and 14-15 under 35 U.S.C. §103(a) based on the proposed combination of Wall and Harumoto should be reversed for at least the following reasons.

Claim 1

In the final Office Action of October 12, 2010, the Examiner alleges that the claimed feature of "a retriever module for retrieving information comprising information representative of said maximum bandwidth rate", as recited by claim 1, is disclosed by the resource optimization module described in paragraph [0034] of Wall. Appellant respectfully disagrees for at least the following reasons.

Rather than disclosing or suggesting a retriever module for retrieving information comprising information representative of a maximum bandwidth rate, as claimed, paragraph [0034] of Wall merely indicates that the resource optimization module determines how much of available network bandwidth to use for transmission of data. That is, the resource optimization module of Wall does not determine the available network bandwidth, but rather determines how much of the available network bandwidth to use.

Even assuming, *arguendo*, that the resource optimization module of Wall does determine available network bandwidth, Wall still not disclose the aforementioned claimed feature because the resource optimization module resides with the computational service provider 700 (see, for example, paragraphs [0033]] and [0111] of Wall). Nowhere does Wall disclose or suggest that the resource optimization module resides on the human interface device (HID). In contrast to Wall, the "retriever module" of claim 1 is part of the "data requesting device". Thus, Wall does not disclose or suggest, *inter* alia, the claimed feature of "a retriever module for retrieving information comprising information representative of said maximum bandwidth rate", as recited by claim 1.

Also in the final Office Action of October 12, 2010, the Examiner alleges that the claimed feature of "said sending module sends to said server via said second network said information, so that said server is able to determine at least one size of successive portions of said required data", as recited by claim 1, is disclosed in paragraph [0085] of Wall. Appellant respectfully disagrees for at least the following reasons.

Paragraph [0085] of Wall, in relevant part, states:

> "Aspects of the designated protocol are provided to compensate for problems associated with transmitting audio streams over a network. The designated protocol specifies a format for interleaving audio samples within data packets to minimize errors which are the result of consecutive missing audio data samples due to packet loss. The receiver may further compensate for missing audio data samples through interpolation. In accordance with the designated protocol, a sequence size is specified to govern how the audio data is processed. The transmitter controls the sequence size adaptively to maintain audio latency within a limit specified for each audio application." (emphasis added)

Here, Appellant notes that the "designated protocol" of Wall referenced above is the "single audio protocol for transmission of audio data between transmitters on a network and the receiver" described in paragraph [0084] thereof that "specifies a sampling rate, bit resolution and quantization scheme". Accordingly, the cited portion of Wall, rather than disclosing or suggesting the feature of "said sending module sends to

said server via said second network said information, so that said server is able to determine at least one size of successive portions of said required data", as recited by claim 1, merely describes a single protocol for the transmission of audio data between transmitters and receivers. That is, in no way does the cited portion of Wall disclose or suggest, *inter alia*, the transmission of information from a receiver to a transmitter that would allow the transmitter to determine and control a sequence size. Rather, the cited portion of Wall merely mentions the definition of a common protocol for the transmission of audio data between transmitters and receivers.

Moreover, nothing in Wall discloses or suggests that the "sequence size" referenced in paragraph [0085] is the same as, or even equivalent to, the "successive portions of said required data", as recited by claim 1. Wall does not clearly explain what is meant by "sequence size", and nothing in Wall would allow one skilled in the art to interpret the "sequence size" referenced in paragraph [0085] as the "successive portions of said required data" recited by claim 1.

Even assuming, *arguendo*, that one skilled in the art would interpret the "sequence size" of Wall as being equivalent to the "successive portions of said required data" recited by claim 1 (an interpretation that Appellant neither acquiesces to nor agrees with), Wall does not disclose or suggest, *inter alia*, that the "sequence size" is determined from information sent from the receiver to the transmitter. That is, the cited portion of Wall nowhere discloses or suggests, *inter alia*, that a sending module of a human interface device (HID) transmits the size of a sequence, or specifies the size of the sequence, to the transmitter. Rather, the cited portion of Wall merely indicates that a size of a sequence is specified, and that the transmitter controls the sequence size.

In addition, the Examiner ostensibly confounds the transmitter of Wall with the "sending module" of the "data requesting device" of claim 1. Rather than the transmitter being on the receiver side (i.e., part of the HID) in Wall, the transmitter seems to be on the sender side, because Wall states: "the transmitter controls the sequence size adaptively to maintain audio latency" (see paragraph [0085] above). This is also confirmed in paragraph [0084] of Wall where it mentions "specifying a single audio

protocol for transmission of audio data between transmitters on a network and the receiver".

Accordingly, for at least the foregoing reasons, Appellant submits that Wall fails to disclose or suggest, *inter alia*, the claimed feature of "said sending module sends to said server via said second network said information, so that said server is able to determine at least one size of successive portions of said required data", as recited by claim 1.

Also in the final Office Action of October 12, 2010, the Examiner ostensibly admits that Wall fails to disclose the claimed feature of "to determine ... at least one delay between two successive sending steps of said portions", as recited by claim 1. In an attempt to remedy this admitted deficiency of Wall, the Examiner relies on Harumoto, and specifically cites paragraphs [0025]-[0026] thereof. Appellant respectfully disagrees and submits that Harumoto is unable to remedy the aforementioned admitted deficiency of Wall for at least the following reasons.

The delay time of Harumoto, rather than being a "delay between two successive sending steps of said portions", as recited by claim 1, is a time between the arrival of data in a reception buffer of a receiver and its consumption by the receiver for play back. Specifically, paragraph [0026] of Harumoto states: "... a delay time from when the terminal writes head data of the stream data to the buffer to when the terminal reads the data to start playback...". Also, while paragraph [0025] of Harumoto (also cited by the Examiner) states: "a target value determination step of determining, by the terminal, a target value of the stream data to be stored in a buffer of the terminal in relation to a buffer capacity and a transmission capacity of the network", it is clear that this passage, even when taken with its broadest reasonable interpretation, fails to disclose or suggest, *inter alia*, the claimed feature of "to determine ... at least one delay between two successive sending steps of said portions", as recited by claim 1.

Accordingly, for at least the foregoing reasons, Appellant submits that Harumoto is unable to remedy the aforementioned admitted deficiency of Wall since it fails to

disclose or suggest, *inter alia*, the claimed feature of "to determine ... at least one delay between two successive sending steps of said portions", as recited by claim 1.

For at least the foregoing reasons, Appellant submits that neither Wall nor Harumoto, whether taken individually or in combination, discloses or suggests each and every feature of claim 1.

Claims 4-5, 7-8, 10-11 and 14-15

Claims 4-5, 7-8, 10-11 and 14-15 ultimately depend from claim 1 and are patentable for at least the same reasons stated above in connection with claim 1.

Claim 9

Claim 9 ultimately depends from claim 1 and is patentable for at least the same reasons stated above in connection with claim 1. Moreover, claim 9 is deemed independently patentable over the proposed combination of Wall and Harumoto for at least the following reasons.

In the final Office Action of October 12, 2010, the Examiner alleges that the claimed feature of "specification means for determining at least one size of successive portions of said data to be provided to said data requesting device", as recited by claim 9, is disclosed in paragraph [0085] of Wall. Appellant respectfully disagrees for reasons similar to those stated above in connection with the similar feature of "said sending module sends to said server via said second network said information, so that said server is able to determine at least one size of successive portions of said required data", as recited by claim 1.

Also in the final Office Action of October 12, 2010, the Examiner alleges that the claimed feature of "said receiving module receiving from said data requesting device information representative of capacities of said data requesting device", as recited by claim 9, is disclosed in paragraph [0052] of Wall. Appellant respectfully disagrees for at least the following reasons.

Paragraph [0052] of Wall merely discusses providing computational capacity to the system independently of the destination the data is generated for. The computational capacity is the capacity to execute computer programs on behalf of multiple HID devices. In no way does Wall, in paragraph [0052] or elsewhere, disclose or suggest, *inter alia*, the claimed feature of "<u>said receiving module receiving from said data requesting device information representative of capacities of said data requesting device</u>", as recited by claim 9.

Also in the final Office Action of October 12, 2010, the Examiner alleges that the claimed feature of "<u>said capacities comprising a maximum bandwidth rate being supported by the data requesting device</u>", as recited by claim 9, is disclosed in paragraph [0139] of Wall. Appellant respectfully disagrees for at least the following reasons.

The Examiner confounds (i) transmission capacity of the network, and (ii) maximum bandwidth rate supported by the data requesting device. These two notions are clearly distinguishable. Appellant's specification clearly states that the maximum bandwidth rate supported by the data requesting device is not dependent on the transmission capacity of the network, but rather on the available resources in the data requesting device itself (see page 12, lines 8-14: "The server having big bandwidth capacity, the server has to take care not to overflow the client" and "client max supported bandwidth rate CBW; that rate involves capacities of the receiving STB 20 as a whole, and is notably linked to the rate of extracting the received data from an input socket buffer"). Therefore, according to the present invention, even when the network transmission capacity is determined, it still does not determine a "<u>maximum bandwidth rate being supported by the data requesting device</u>" as recited by claim 9.

For at least the foregoing reasons, Appellant submits that neither Wall nor Harumoto, whether taken individually or in combination, discloses or suggests each and every feature of claim 9.

Accordingly, for at least the foregoing reasons, Appellant respectfully requests that the Board reverse the rejection of claims 1, 4-5, 7-11 and 14-15 under 35 U.S.C. §103(a) based on the proposed combination of Wall and Harumoto.

B. Patentability of Claims 2-3, 6 and 12-13

The rejection of claims 2-3, 6 and 12-13 under 35 U.S.C. §103(a) based on the proposed combination of Wall, Harumoto and Clisham should be reversed for at least the following reasons.

Claims 2-3, 6 and 12-13 ultimately depend from claim 1 and are patentable for at least the same reasons stated above in connection with claim 1 since Clisham is unable to remedy the deficiencies of Wall and Harumoto.

Accordingly, Appellants respectfully request that the Board reverse the rejection of claims 2-3, 6 and 12-13 under 35 U.S.C. §103(a) based on the proposed combination of Wall, Harumoto and Clisham.

The $540.00 fee for this Appeal Brief is being charged to Deposit Account 07-0832 using EFS-WEB.

<div align="center">Respectfully submitted,</div>

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VIII. Claims Appendix

1. Data requesting device through at least one first communication network from at least one data server, wherein said data requesting device is able to support up to a maximum bandwidth rate, and said data requesting device comprising:

a sending module for sending requests of determined data to the server via at least one second communication network,

a receiving module for receiving streamed data from said server into an input buffer via said first communication network and for providing said data to processing means for them to be exploited,

a retriever module for retrieving information comprising information representative of said maximum bandwidth rate, and

said sending module sends to said server via said second network said information, so that said server is able to determine at least one size of successive portions of said required data and at least one delay between two successive sending steps of said portions.

2. Data requesting device according to claim 1, wherein said data requesting device comprises a data pump to extract data available in said input buffer and to transfer said data into a central memory for said data to be exploited by said processing means, said data pump being able to produce a pause control signal when said data in said central memory exceed a predetermined high threshold level of said central memory, and in that said sending module sends said pause control signal to said server.

3. Data requesting device according to claim 1, wherein said data pump is able to produce a resume control signal when the data transfer from said input buffer to said central memory has been paused and said data in said central memory decrease down to a predetermined low threshold level of said central memory, and in that said sending module sends said resume control signal to said server.

4. Data requesting device according to claim 2, wherein said data requesting device comprises an injector to transfer said data from said central memory to said processing means only when said data in said central memory fill up to a predetermined middle threshold level of said central memory.

5. Data requesting device according to claim 2, wherein at least one of said threshold levels of said central memory depends on a round-trip time between said data requesting device and said server.

6. Data requesting device according to claim 1, wherein said data requesting device is able to produce pause, resume and seek control signals for respectively pausing and resuming data streaming and for positioning at given appropriate places of said determined data, and said sending module sends to said server sequences of successively said pause, seek and resume control signals, so as to allow at least one feature among fast motion and reverse motion.

7. Decoder, comprising a data requesting device according to claim 1.

8. Data requesting process through at least one first communication network from at least one data server to a data requesting device wherein said data requesting device is able to support up to a maximum bandwidth rate and said data requesting process comprising the following steps:

sending requests of determined data to the server via at least one second communication network,

receiving streamed data from said server into said input buffer to then be exploited,

sending information comprising information representative of said maximum bandwidth rate from said data requesting device to said server via said second network, so that said server is able to determine at least one size of successive portions of said required data and at least one delay between two successive sending steps of said portions,

said data requesting process being executed by a data requesting device compliant with claim 1.

9. Data transmitting device, wherein said data transmitting device comprises:

a receiving module for receiving requests of determined data from at least one data requesting device,

specification means for determining at least one size of successive portions of said data to be provided to said data requesting device, and

a streaming module for triggering streaming of said data portions to said data requesting device,

said receiving module receiving from said data requesting device information representative of capacities of said data requesting device, and said specification means determining said portion size in function of said information,

said capacities comprising a maximum bandwidth rate being supported by said data requesting device;

said specification means determining at least one delay between two successive sending steps of said portions in function of said information,

and said streaming module periodically triggers streaming of said data portions having said portion size to said data requesting device, with a period equal to said delay,

said data transmitting device being provided for a data requesting device according to claim 1.

10. Data transmitting device according to claim 9, wherein said receiving module receives pause control messages from said data requesting device, and said streaming module pauses said data streaming when one of said pause control messages is received.

11. Data transmitting device according to claim 9, wherein said data requesting device is able to support up to a maximum bandwidth rate, said capacities comprise said maximum bandwidth rate.

12. Data transmitting device according to claim 9, wherein said receiving module receives slow motion messages from said data requesting device, and said specification means determines at least one increased value of said period when said slow motion messages are received.

13. Data transmitting device according to claim 9, wherein said receiver receives at least one kind of messages among fast motion and reverse motion messages, from said data requesting device, and said data transmitting device comprises a parsing module able to identify successive relevant places in said determined data for at least one of said fast and reverse motions, said specification means successively positioning at said places, when one of said fast motion and reverse motion messages is received.

14. Data transmitting process, wherein said data transmitting process comprises the following steps:

receiving requests of determined data from at least one data requesting device, as well as information representative of capacities of said data requesting device,

determining at least one size of successive portions of said data to be provided to said data requesting device, in function of said information, and

streaming said data portions to said data requesting device,

said capacities comprise a maximum bandwidth rate of said data requesting device;

said specification step comprises determination of at least one delay between two successive sending steps of said portions in function of said information, and

said streaming step includes periodically streaming said data portions having said portion size to said data requesting device, with a period equal to said delay,

said data transmitting process being executed by a data transmitting device compliant with claim 9.

15. Computer program product, comprising program code instructions for executing the steps of the process of claim 8 when said program is executed on a computer.

IX. Evidence Appendix

None.

X. Related Proceedings Appendix

None.